CLAIMS

1. Particle, comprising

(a) a protein envelope with a fusion protein comprising a virus protein, a cell permeability-mediating peptide and a heterologous cell-specific binding site and

(b) a nucleic acid sequence present in the protein envelope, which comprises the sequences for a virus-specific packaging signal and a structural gene.

2. Particle according to claim 1, wherein the virus protein is derived from an adenovirus, adeno-associated virus, vaccinia virus, baculovirus or hepadnavirus.

3. Particle according to claim 2, wherein the hepadnavirus is a hepatitis B virus.

4. Particle according to any of claims 1-3, wherein the virus protein is a surface protein.

5. Particle according to claim 4, wherein the surface protein is an LHBs.

6. Particle according to any of claims 1-3, wherein the virus protein is a core protein.

7. Particle according to claim 6, wherein the core protein is an HBcAg.

8. Particle according to any of claims 1-7, wherein the cell permeability-mediating peptide comprises the following amino acid sequence: P L S S I F S R I G D P.

9. Particle according to any of claims 1-8, wherein the heterologous cell-specific binding site is RGD.

10. Particle according to any of claims 1-9, wherein the fusion protein is that in Fig.1 or 2.

11. Method for the preparation of the particle according to claim 1, wherein the fusion protein contains an LHBs and a heterologous cell-specific binding site, comprising the following method steps:

(a) cotransfection of cells which code for a hepatitis B virus genome, wherein these cells do not express LHBs, with a first expression vector coding for a fusion protein which comprises an LHBs and a heterologous cell-specific binding site, and with a second expression vector comprising a virus-specific packaging signal and a structural gene, and

(b) isolation and purification of the particle.

12. Method for the preparation of the particle according to claim 1, wherein the fusion protein comprises an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, comprising the following method steps:

(a) cotransfection of cells coding for an HBV polymerase with a first expression vector coding for a fusion protein which comprises an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, and with a second expression vector comprising a virus-specific packaging signal and a structural gene, and

(b) isolation and purification of the particle.

13. Fusion protein, comprising a virus protein, a cell permeability-mediating peptide and a heterologous cell-specific binding site.

14. Fusion protein according to claim 13, comprising the amino acid sequence of Fig.1 or 2 or an amino acid sequence differing therefrom by one or more amino acids.

15. DNA, which codes for the fusion protein according to claim 13.

16. A DNA, which codes for the fusion protein according to claim 14, including,

(a) the DNA from Fig.1 or 2 or a DNA differing therefrom in one or more base pairs, or

(b) a DNA which is related to the DNA of (a) by virtue of the degenerate genetic code.

17. Expression vector, which codes for the DNA according to claim 16.

18. Use of the particle according to any of the claims 1-10 for gene therapy of tissues and cells.